



**Pair of PMR446 Two-Way
Personal Radios
Model: TP391**

**USER MANUAL
MANUALE D'USO
MANUEL DE L'UTILISATEUR
BEDIENUNGSANLEITUNG
MANUAL DE USUARIO
MANUAL DO USUÁRIO
HANDLEIDING
BRUKSANVISNING**

PAIR OF PMR446 TWO WAY PERSONAL RADIOS

MODEL: TP391

USER MANUAL

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INTRODUCTION

Thank you for selecting the Oregon Scientific™ TP391 as your product of choice. This product is a portable, easy-to-use two-way radio transceiver that you can use to contact your family and friends at shopping malls, amusement parks, sports events, beaches, forests and so on. You can also use it as a vital communications tool in a neighborhood watch.







The transceiver has 8 channels and 38 CTCSS (Continuous Tone Coded Squelch System) codes. If someone else is using the same channel as you, you can select another channel or use the CTCSS feature. Talk with another person if you are both tuned to the same channel and/or CTCSS code.

Please note that the use of this item is subject to applicable regulations of the country where used.

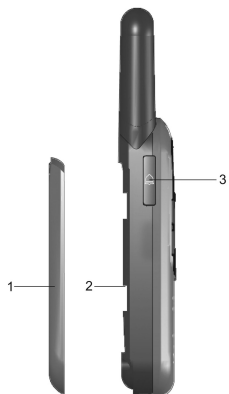
KEY FEATURES


FRONT VIEW



NO.	DESCRIPTION	FUNCTION
0	Antenna	Receives and transmits signals
1	LED indicator	Lights up red when transmitting a signal
2		Auto scans for available channel / Monitors current channel for activity
3		Scrolls through menu options / Locks and unlocks the keypad
4	Speaker	Generates audible sound
5	Connection pins	Slot pins into a desktop charger docking station (docking station not included)
6	Microphone	Picks up voice sounds
7	Headset jack / charger jack	Allows use of headset for hands-free communication or use of AC adapter for charging
8		Push to talk / Confirms selection in Menu Mode
9		Increase volume / Select Channel, CTCSS, Call Tone, Mic / VOX level in Menu Mode
10		Decrease volume / Select Channel, CTCSS, Call Tone, Mic / VOX level in Menu Mode
11		Press to turn the unit on or off

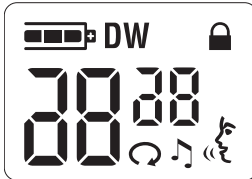
BACK VIEW










NO.	DESCRIPTION	FUNCTION
1	Battery door	Remove to access battery compartment
2	Battery compartment	Uses lithium 3.7V-720mAh rechargeable battery
3		Sends call tone to other users of the same frequency

LCD DISPLAY SYMBOLS

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SYMBOL	FUNCTION
 (big)	Channel number: Select between 8 channels
 (small)	CTCSS code: Adjust to minimize interference problems
DW	Dual Watch: Monitor 2 channels simultaneously
	Battery indicator: Provides battery status during operation
	Call tone: Page another user
	Keypad lock: Locks keypad to prevent accidental button activation
	Auto-scan: Unit is scanning Channels or CTCSS
	VOX: Voice activation system

SAFETY AND CARE INSTRUCTIONS

SAFETY PRECAUTIONS

Please observe the following safety precautions when setting up and using this product.

- * LCD panel – The LCD panel is made of glass, and may break if the unit is dropped or impacted.
- * Heat sources – Keep the product away from heat sources such as radiators, stoves, heaters, and other heat-generating products.
- * Water and moisture – Do not use the product in or near water or in high moisture areas such as a bathroom.

CARING FOR THIS PRODUCT

To ensure you receive the maximum benefit from using this product, please observe the following guidelines.

- * Cleaning – Use a damp cloth. Do not use liquid cleaning agents, benzene, thinner, or aerosols.
- * Repair – Do not attempt to repair the product or modify the circuitry by yourself. Contact the retailer or a qualified repairman if the product requires servicing. Only use replacement parts that are recommended by the manufacturer.
- * Do not scratch hard objects against the LCD display as this may cause damage.

CAUTION

- * To avoid risk of fire or injury, do not attempt to charge non-rechargeable batteries. Please turn off the unit while charging.
- * Replace only batteries with the same or equivalent type recommended by the manufacturer.
- * Please dispose of old, defective batteries in an environmentally friendly manner in accordance with the relevant legislation.
- * See additional battery warnings in the “Power” section of the user manual.

- * Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
- * No naked flames, such as lighted candles, should be placed near the apparatus.
- * To reduce the risk of electric shock, do not expose this application to rain or moisture.

GETTING STARTED


POWER

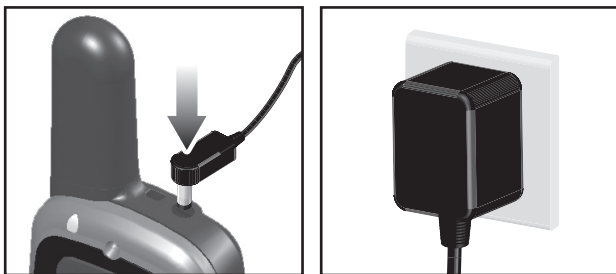
To insert the batteries:

1. Slide the battery door open.
2. Insert the lithium battery into the battery compartment, making sure the polarities (+ and -) match.
3. Slide the back cover and clip into place.



WARNING: There is a danger in which incorrectly placing the battery can cause an explosion. Always make sure the radio is switched off before installing or changing the battery. Replace only with the same or equipment type. Use **ONLY** with lithium 3.7V 720mAh rechargeable battery. Contact your local retailer for more information.

NOTE:  will flash to indicate low battery power.


To charge the battery using the AC adapter:

Charge the battery for 12 hours on the first charge. After that, it should take 3 or less hours to charge. The LCD backlight will be turned on when charging. The LED indicator will be turned on when battery is full.

NOTE:

1. To maintain the battery life of your two-way transceiver it is recommended that you only charge the battery when needed. Overcharging the battery will reduce performance.
2. For best results ensure that the unit is turned off before charging.
3. Remove batteries before storing your radio for extended periods. Batteries corrode over time and may cause permanent damage to your radio.

TURN THE UNIT ON / OFF**To turn the unit ON or OFF:**

Press and hold  until you hear a beep and the LCD display appears or disappears.

VOLUME

To change the volume level:


Use  or  to increase or decrease volume.

RESET




To reset the unit:

Remove the batteries for two minutes and insert them again.

TALK TO ANOTHER TRANSCEIVER

For best transmission speak about 5 cm away from the radio and leave a short pause before speaking once you have pressed .

To talk to another transceiver:

1. Press and hold  to check if the channel is free.
2. Press and hold  and speak into the microphone to transmit.
When finished, release the button. The transceiver will automatically play received transmissions.
3. Release  once you have finished speaking to allow other radios to respond.

NOTE: You can only communicate with another transceiver that is on the same channel and using the same CTCSS code as your transceiver.

PAGE ANOTHER TRANSCEIVER

To page all transceivers tuned to the same channel:



Press .



NOTE: The call tone will be heard from your device and from the receiving party's unit at the same time.

KEYPAD LOCK

To avoid accidentally changing the channel and the unit's preferred settings, you can lock the keypad.


To lock or unlock the keypad:





Press and hold  for 1.5 seconds.  appears when the keypad is locked.

NOTE: While the keypad is on you can still use the  and  keys.



MENU OPTIONS

To access the Menu Options and change settings:

1. Press . The transceiver will then toggle between the following configurable settings:

SYMBOL	SETTING	DESCRIPTION
 (big)	Channel	Selects channel for transmission
 (small)	CTCSS	Selects a CTCSS code for the current channel
	Call tone	Selects 1 of 10 call tones
	VOX	Enables / disables voice-activated transmission (0-3); selects transmission delay time (1-5)
DW	Dual Watch	Monitors 2 channels simultaneously

2. Use  and  to select settings.






3. Press  to confirm and move to the next setting or press  to confirm the changes and exit the Menu Options. Settings will automatically be confirmed after 5 seconds if no key is pressed.

SELECT A CHANNEL OR CTCSS




The transmitter and receiver **must** be on the same channel using the same CTCSS code in order for you to communicate with another party.

This feature allows you to utilize a less often-used range of CTCSS codes within a main channel to avoid congestion on the main channel and filter out unwanted noise and static. There are 38 CTCSS codes for each main channel.

To select between 8 channels or 38 CTCSS codes:

1. Press  once (for channel) or twice (for CTCSS code) until the corresponding channel / CTCSS number starts flashing.
2. Press and hold  or  to change the channel or CTCSS code.
3. Press  to confirm and exit the menu. Or, press  to confirm and go to the next Menu Option.





NOTE: To communicate with other units that do not have CTCSS code capability, switch your unit to the same channel and set the CTCSS code to “0”.

TIP: Before trying to transmit on the selected channel, press  to check the activity on that channel. If someone is already on the selected channel, try another channel that is clear. To change the basic channel, in menu mode, press  or  to move to the next higher or lower channel number.

CALL TONE

To alert other radios set to the same channel as you that you want to communicate with them, you can transmit a call tone to pre-warn them.

To change the call tone:



1. Press  3 times until the number starts flashing.
2. Press and hold  to change the tone.
3. Press  to confirm and exit the menu. Or, press  to confirm and go to the next Menu Option.

NOTE: To page another unit, press . The selected call tone will be heard from your device and from the receiving party's unit at the same time.

VOX LEVEL / VOICE DELAY TIME






The Voice Activated Transmission (VOX) function allows your voice to activate transmission automatically when the transceiver is used with an optional hands-free microphone / headset. If the unit is set to VOX level 1, 2 or 3, it will automatically detect and transmit your voice through to the selected channel. The VOX level and transmission delay time should be adjusted according to your voice loudness and personal preference.

To set up a headset:

1. Press and hold  to switch the radio off.
2. Plug in the headset
3. Press and hold  to switch the radio back on again.

NOTE: This product is only compatible with Oregon Scientific headsets, please ask your local retailer for further information.


To change the VOX level:

1. Press  4 times until the number starts flashing.
2. Press and hold  or  to change the VOX level.
3. Press  to confirm and exit the menu. Or, press  to confirm and go to the next Menu Option.

LCD SYMBOL	DESCRIPTION
0	VOX disabled
3	Low sensitivity – only audibly loud voices are transmitted (useful for noisy environments)
2	Normal sensitivity – ideal setting for voice-activated transmission
1	High sensitivity – detects and transmits all sounds (including background noise)

Once the VOX level is activated you can set a delay time, which keeps the unit transmitting for 1 to 5 seconds after you have finished speaking (level 1 = 1 second and level 5 = 5 seconds).

To set the delay time:

1. Press  5 times until the number starts flashing.
2. Follow steps 2-3 above.

ROGER BEEP

With Roger Beep, the receiving party hears a beep tone when a message has been transmitted. This avoids situations where messages are interrupted during transmission.






To disable / enable Roger Beep:

Press and hold , then press  to turn ON the unit.

DUAL WATCH (DW)

The Dual Watch feature allows you to monitor more than one channel simultaneously.

To set Dual Watch:

1. Press  6 times until "DW" appears and the channel number starts flashing.
2. Press and hold  or  to select a watch channel (1-8).
3. Press  to confirm and exit the menu. Or, press  to confirm and go to the next Menu Option. Once set, the display will toggle between 2 open channels and the unit will be able to receive transmissions from the 2 channels (your existing channel and the channel set in DW).

To disable Dual Watch:





Follow steps 2-3 above and select "0" for step 2.

SCAN FOR A CHANNEL / CTCSS


There are 2 scenarios when scanning for a channel / CTCSS is necessary:

1. If you have a CTCSS code set and want to make sure that the channel is not busy.
2. If you are in a fringe area and the radio is cutting in and out.

To auto-scan for a channel / CTCSS:

1. Press and hold . The unit will go to monitor mode.
2. Press and release , the unit will start enter scan mode.
3. Once an active channel is found the unit will stop scanning. Press  to communicate with other radios on that channel or  to resume scanning.

To stop auto-scan:

Press . The unit will revert back to the original channel that was set prior to scanning.

NOTE: If you activate a scan while your code is set to 0, the radio will check for any activity on each channel, regardless of the code used on that channel. If you activate a scan while the code is between 1 and 38, the radio will only check for activity on the specific channel and code combinations set on your radio.

RESET

To reset to the default settings, remove the batteries and power adapter and leave for several minutes.

TROUBLESHOOTING

See below for some common problems and their remedies. **DO NOT** attempt any repairs yourself. This will invalidate your warranty.

PROBLEM	POSSIBLE CAUSES / REMEDIES
Can't turn the radio on	<ul style="list-style-type: none"> • Check the battery is correctly installed and has been fully charged
Can't communicate with other radios	<ul style="list-style-type: none"> • Check the channel and CTCSS code
No information is displayed on the LCD display	<ul style="list-style-type: none"> • Reset by removing the batteries and power adapter for several minutes. This will return the unit to the default settings
VOX function is not working	<ul style="list-style-type: none"> • Check the headset is correctly plugged in and is compatible with the TP391 radio

SPECIFICATIONS

Operation frequency	446.00625 to 446.09375 MHz
Channels	8
CTCSS Codes	38 standard codes
Modulation type	FM
Microphone	Internal / external condenser type
Power supply	3.7V 720mAH Li-ion battery
Sensitivity	<= -119 dBm
Noise squelch	Auto
VOX levels	3
Call tones	10
Audio output power	125mW
Audio distortion	< 5%
RX signal to noise ratio	>43dB
TX RF output power	500 mW @ 4.5VDC
Dimensions (H x W x D)	120 x 42 x 20 mm (4.7 x 1.7 x 0.8 in)
Weight (without batteries)	70 grams (2.5 oz)

ABOUT OREGON SCIENTIFIC

Visit our website (www.oregonscientific.com) to learn more about Oregon Scientific products such as digital cameras; MP3 players; children's electronic learning products and games; projection clocks; health and fitness gear; weather stations; and digital and conference phones. The website also includes contact information for our Customer Care department in case you need to reach us, as well as frequently asked questions and customer downloads.

We hope you will find all the information you need on our website. However if you are in the US and would like to contact the Oregon Scientific Customer Care department directly, please visit:

<http://www2.oregonscientific.com/service/default.asp>

OR call 1-800-853-8883. For international inquiries, please visit:
www2.oregonscientific.com/about/international.asp

EU-DECLARATION OF CONFORMITY

Hereby, Oregon Scientific, declares that the Pair of PMR446 Two-Way Personal Radios (model: TP391) is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

A copy of the signed and dated Declaration of Conformity is available on request via our Oregon Scientific Customer Service.

